

Fig: I.

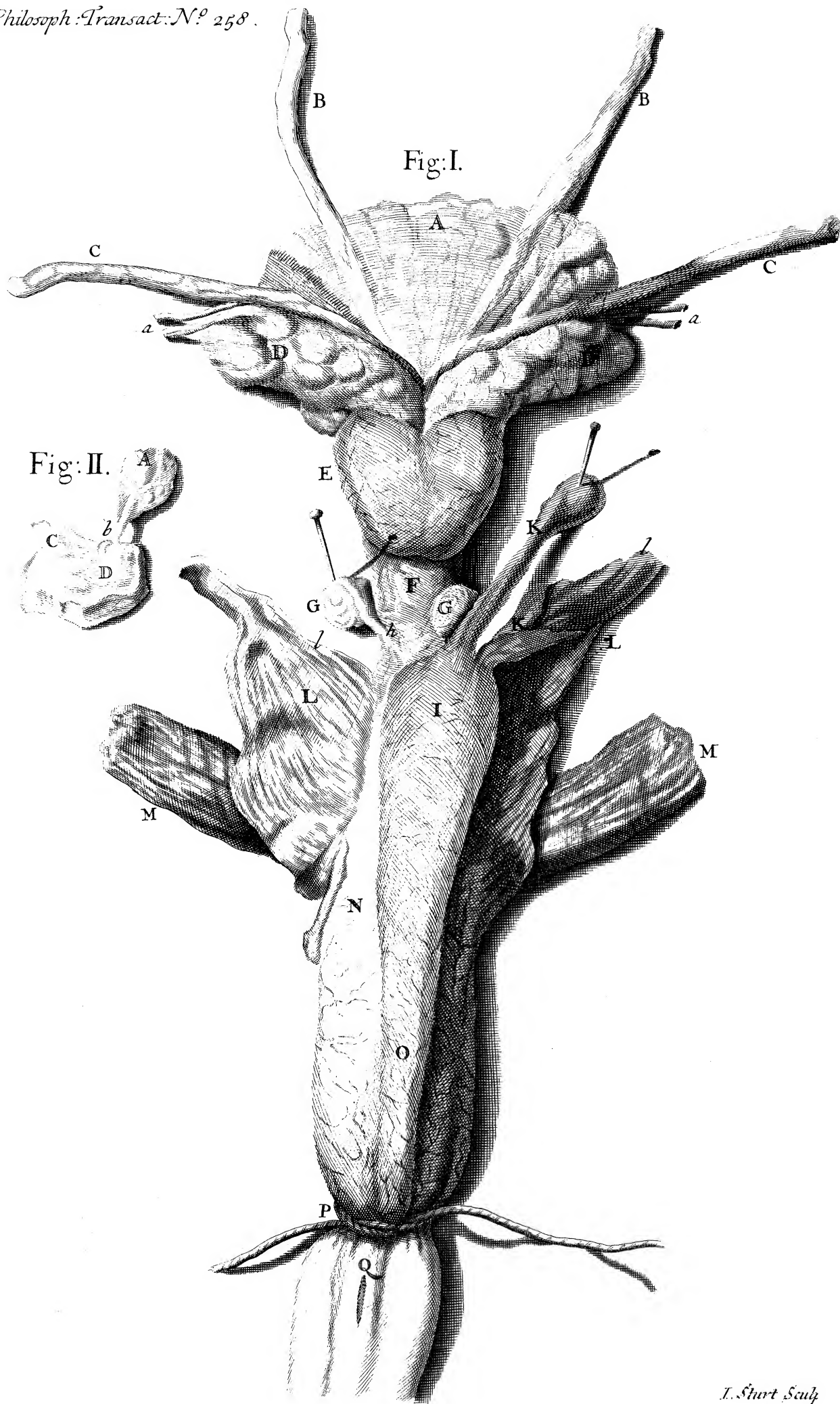
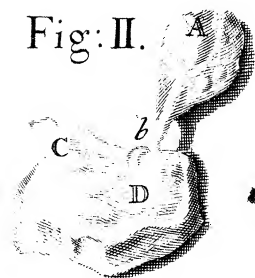


Fig: II.



I. *An Account of two Glands and their Excretory Ducts lately discover'd in Human Bodies. By Mr. William Cowper. F. R. S.*

NOtwithstanding the general application of the Learned in this Age to Anatomy, and the success wherewith they have cultivated it, there remain undoubtedly many considerable Discoveries to be made, many useful Organs to be detected, of great consequence to the right understanding of the **Animal Oeconomy**; for the knowledge of which perhaps Posterity shall be obliged to the successful Labours of those that shall come after us, and wonder how they escap'd our Observation, as we have done by those that preceded us. Of this the Discovery of two Glands (not before that we know taken notice of in a Humane Subject) may be an Instance, especially since they are found in a part that has not only been accurately described by others, but frequently and carefully examin'd by my self before I took notice of them. This may encourage us not to despond, if we don't find all our Enquiries attended with Discoveries, nor to set an over-value upon our selves for those which our good Fortune may present us with; since it is sometimes the misfortune of Men of greater Application and Sagacity than our selves to meet with Disappointments.

About a quarter of an Inch below the Prostate Glands (Fig. 1. E.) I found two other small Glands (*ib.* G G) placed on each side the *Urethra* (*ib.* F) a little above the

the Bulb of its Cavernous Body : (*ib.* 1.) These Glands are of a depressed Oval Figure, not exceeding the magnitude of a small *French Bean*. After those parts of the *Musculus Accelerator* (*ib.* 11) are removed, which pass over these Glands, you may feel them placed like two hard Bodies on each side the *Urethra*. They incline to a yellowish colour like that of the Prostates. Their Excretory Ducts appear on their internal Surface (Fig. 2. A. b.) next the inner Membrane of the *Urethra* (Fig. 2. C) whence they descend about half an Inch in length before they grow less and pierce that Membrane obliquely at their opening into the *Urethra*, (*ib.* D.) in which they discharge their separated Liquor. After opening the upper part of the *Urethra* towards the *Dorsum Penis* and expanding its inner Membrane, if you compress these Glands, you may see their Liquor issue from two distinct Orifices, which is very Transparent and Tenacious: these two Orifices open into the *Urethra* just below its bending under the *Ossa Pubis* in the *Perineum*.

The Artifice of Nature is very extraordinary in thus placing these Glands and their Excretory Ducts, since on the Erection of the *Penis* and the distension of the Bulb of the Cavernous Body of the *Urethra*, they are thereby necessarily compressed, and the Liquor contain'd in their Excretory Ducts forced through their two Orifices into the Cavity of the *Urethra*: besides this, that part of the *Musculus Accelerator* (mention'd above) which passes over these Glands, contributes to this Compression. It seems requisite such Agents should Conspire in Compressing these Organs, since the Liquor they separate is so very Tenacious; which consistence of it is absolutely necessary for the Uses it is employed in.

The main design of Nature in framing these Glands seems to respect the grand Work of Generation, which will be more evident if we examin the Analogous Organs in other Animals. In Rats these Glands are remarkably large, and are so placed that upon the Erection of the *Penis* they are comprest by its Turgescency and apposition of the *Ossa Pubis*; the like may be observ'd in other Animals, particularly in Hedg-hogs.

Boars have these Glands very large, and the Matter they separate is more tenacious, and not so transparent as in all other Creatures I have examin'd; there is something peculiar in the contrivance of them in this Animal, each Gland being cover'd with a peculiar Muscle not unlike the Gizzards of some Fowl; which Mechanism seems contrived for more forcibly compressing of them, to discharge their very tenacious Contents into the *Urethra*, and that not only in the time of Coition, but at any other time; which seems to be more peculiarly required in those Creatures, because the passage of their Urin is very long, and therefore stands in need of more of this Glutinous Matter to besmear it, whereby it is defended from the injuries that may arise from the Salts of the Urin. As the Urin of different Animals is more or less impregnated with pungent Salts, so the proportion of these Glands differ as well as on the account of the various lengths of their *Urethra's*. It is remarkable we don't find these Glands in Females like those in Males, tho' they have something Analogous to them, which are described in Women by *De Graaf*, and call'd *Prostata Mulierum*; but the Orifices of their Excretory Ducts opening at the exit of the *Urethra*, they serve to defend the *Nympha* and *Labia Pudendi* only from the Urinous Salts, and discharge their Liquor *in Coitu*, as I have elsewhere taken notice; the whole *Urethra* in them being so short, that the contraction

ction of the Sphincter Muscle of the Bladder is sufficient to expel any remains of Urine from that passage.

The Use of the Glands (I have now Described) is twofold; first on the Erection of the *Penis* there is so much of their Liquor discharged into the *Urethra* as suffices to drive out any remains of Urine, and prevent its mixing with the *Semen*; and at other times the continual discharge of some part of their Liquor into the *Urethra*, defends that passage from the Salts in the Urine: the like continual exudation cannot happen either from the excretory Ducts of the Prostates or those of the *Vesicula Seminales*, because the nearness of the Sphincter Muscle so corrugates the inner Membrane of the *Urethra*, as prevents an easie passage of the Liquor by the *Ostiole* of the former: nor can the *Semen* run out of the latter, since the *Caruncula* or *Caput Gallinaginis* is contriv'd on purpose to prevent it: wherefore the *Diaphragme*, Abdominal Muscles, and *Levatores Ani* are employed in compressing those parts to discharge their Contents.

It is not improbable that the Matter which flows at the latter end of the Cure of Venereal Diseases, and is called a *Gleet*, proceeds from these Glands, and not from the *Prostata* or *Vesicula Seminales*, as is commonly supposed; which may afford us no mean Argument for the Use of Injections in such Cases; instead of which some Practitioners persecute their Patients with violent Purges, and cram them with vast quantities of Astringent Medicines. We may easily conceive how such Gleets become sometimes very Obstinate, if not Incurable, by supposing the Ulcer in that Contact to happen upon the *Ostiole* of these Secretory Ducts.

F 1 G. I.

- A, A Portion of the Bladder of Urine.
- BB, Parts of the Ureters.
- CC, Parts of the *Vasa Deferentia*.
- DD, The *Vesicula Seminales* somewhat distended with Wind by blowing into the *Vasa Deferentia*.
- aa, The Blood Vessels of the *Vesicula Seminales*.
- E, The *Glandula Prostatæ*.
- F, The *Urethra* expanded after opening its superior and fore part to see the *Ostiole* of the Excretory Ducts of the following Glands.
- GG, The two Glands above described, which from the Liquor they sepearate may be call'd *Glandula Mucosa*.
- h, The Excretory Duct of one of the last mention'd Glands, before it passes under the Bulb of the Cavernous Body of the *Urethra*.
- I, The Bulb of the Cavernous Body of the *Urethra* partly distended with Wind, and devested of the Accelerator Muscle to shew its External Membrane, which is very thin, whereby the last nam'd Muscle does more adequately compress that Bulb, and drive its contain'd Blood towards the *Glands* when the *Penis* is Erected.
- K, The third Pair of Muscles of the *Penis*.
- LL, The Accelerator Muscle divided in its middle Seam on the Bulb, and afterwards freed from it, and Expanded.
- ll, The upper part of this Muscle which passer immediately over the Mucous Glands.
- MM, The *Musculi Directores Penis*.
- NN, The Cavernous Bodies of the *Penis*.
- O, The Cavernous Body of the *Urethra*.
- P, The

- P, The Ligature made to prevent the Wind from passing out of the Cavernous Body of the *Urethra* and its Bulb.
Q, The Aperture by which the Inflation was made.

F I G. II.

One of the Mucous Glands after being Macerated in Water, and its Excretory Duct fill'd with Quicksilver.

- A, The Mucous Gland somewhat distended;
b, Its Excretory Duct.
C, A Portion of the Internal Membrane of the *Urethra* Expanded.
D, The *Ostiola* of the last mention'd Excretory Duct,
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